

UNIVERSITY OF ESWATINI
FACULTY OF HEALTH SCIENCES
GENERAL NURSING DEPARTMENT

RE-SIT EXAMINATION: AUGUST, 2021

COURSE TITLE; HUMAN ANATOMY AND PHYSIOLOGY I
COURSE CODE: GNS 115
TIME ALLOCATED: TWO (2) HOURS
MARKS ALLOCATED: 75
TOTAL NO. OF PAGES: 6

INSTRUCTIONS:

1. THERE ARE TWO SECTIONS IN THIS PAPER.
 - i) SECTION I 35 MARKS
 - A. MULTIPLE CHOICE QUESTIONS
 - B. MATCHING
 - ii) SECTION II IS SHORT ANSWERS AND ESSAYS
 - A. SECTION II CARRIES 40 MARKS
2. PLEASE ANSWER ALL SECTIONS
3. USE ANSWER SHEET FOR ALL YOUR ANSWERS
4. DO NOT OPEN YOUR QUESTION PAPER UNTIL PERMISSION HAS BEEN GRANTED BY INVIGILATOR.

SECTION 1

A. MULTIPLE CHOICE QUESTIONS

(25 MARKS)

For each of the following questions /statements choose the most appropriate response and write it in your answer book. e.g. 1 = C

1. Which of the following refers to softening of the bones?
 - A. Osteomalacia
 - B. Fractures
 - C. Ostéoporosis
 - D. Inflammation

2. How many bones does the adult human skeleton has?
 - A. 200
 - B. 204
 - C. 206
 - D.210

3. In which part of the body are carpals located?
 - A. The foot
 - B. The skull
 - C. The hand
 - D. The vertebra

4. Which of the following bones protect the brain?
 - A. The vertebra
 - B. The cranium
 - C. The pelvic bones
 - D. The femur

5. Which of the following bones protect the urinary bladder?
 - A. ribs
 - B. Shoulder girdle
 - C. Skull
 - D. Pelvic girdle

6. Which tissue has poor regenerative capacity in the human body?
 - A. The osseous tissue

- B. The connective tissue
- C. The nervous tissue
- D. The epithelial tissue

7. Which of the following tissues covers and protect the body?

- A. The osseous tissue
- B. The connective tissue
- C. The nervous tissue
- D. The epithelial tissue

8. Which of the following tissue attaches bone to bone?

- A. ligament
- B. Tendon
- C. Synovial fluid
- D. Muscles

9. Cartilage is classified as which of the following tissues?

- A. Connective tissues
- B. Muscular tissue
- C. Nervous tissue
- D. Bone tissue

10. Which organ of the body assists with regulation of body temperature?

- A. The heart
- B. The skin
- C. The kidney
- D. The intestines

11. Where are the smallest bones of the skeleton found?

- A. In the brain
- B. In the eye
- C. In the ear
- D. In the pelvic

12. Which is the largest bone of the human skeleton?

- A. femur

- B. Ischium
- C. Pubic
- D. Tibia

13. Eccrine glands are abundant in the...

- A. Forehead
- B. Axilla
- C. Abdomen
- D. Chest

14. Which bone/s forms the pubic symphysis?

- A. Ischium bones
- B. Ilium bones
- C. Pubic bones
- D. A and C
- E. A and B

15. The physiology of the skin is the following **except**.

- A. Protection
- B. Blood reservoir
- C. Temperature regulation
- D. Locomotion

16. Which joint is the least secured joint in the human body?

- A. Knee
- B. Elbow
- C. Shoulder
- D. Hip

17. The scientific study of body tissues is called

- A. Cells anatomy
- B. Cytology
- C. Histology
- D. Blood count

18. The site for genetic information in a cell is the...

- A. Cell membrane

- B. Cytoplasm
 - C. Mitochondria
 - D. Nucleus
19. Anatomy is the scientific study of
- A. Cells
 - B. Tissues
 - C. Body structures and their relationships
 - D. Body functions and their imbalances
20. Cytology is the scientific study of the.....
- A. Human body
 - B. Body systems
 - C. Body cells
 - D. Body tissues
21. Which layer of the skin houses nerves and blood vessels?
- A. The epidermis
 - B. The hypodermis
 - C. The basal layer
 - D. The dermis
22. Which is the most dangerous skin cancer?
- A. Cancer of melanocytes
 - B. Basal cell carcinoma
 - C. None of the above
 - D. Squamous cell carcinoma
23. Which bone emerges from chondral ossification?
- A. The femur
 - B. The phalanges.
 - C. The occipital bone
 - D. Both A and B
24. Hemiplegic refers to ...
- A. Paralysis of the neck down
 - B. Paralysis on one side of the body.
 - C. Paralysis from the waist down.
 - D. Both A and C

25. Quadriplegia refers to...
- A. Paralysis from the neck down
 - B. Paralysis on one side of the body.
 - C. Paralysis from the waist down.
 - D. Both A and C

SECTION 1 B MATCHING

(10 marks)

Choose the most appropriate response in column B to the statements in Column A and write the correct alphabet in your answer booklet.

| NO | COLUMN A | COLUMN B |
|----|---------------------------------------------------|----------------------|
| 1 | Which cartilage cushions the vertebral bones | A. Supination |
| 2 | The movement that reduce angle between two bones. | B. Abduction |
| 3 | The joint that joins the two parietal bones. | C. Smooth |
| 4 | Joint of bones of the cranium. | D, Skeletal muscle |
| 5 | The muscles that assist with peristalsis. | E. Adduction |
| 6 | The.....muscle is responsible for locomotion. | F. Sagittal |
| 7 | Movement of the limb away from midline. | G. Flexion |
| 8 | This tissue covers the end of long bones. | H. Suture |
| 9 | Movement of the limb towards midline | I. Fibro cartilage |
| 10 | Joints of the cranium. | J. Hyaline cartilage |

SECTION 2 SHORT ANSWERS ESSAYS

(40 MARKS)

SECTION 2A

(11 marks)

1. Define the following anatomical terms. (1 marks each)
 - a. Luxation
 - b. Arthrology
 - c. Macroscopic anatomy.
 - d. Dermatologist
 - e. Orthopaedics
 - f. Chondral ossification
 - g. Membranous ossification
 - h. Bursitis
 - i. Dermatologist
 - j. Alopecia
 - k. Lysosomes
 - l. Golgi apparatus

SECTION 2 B

(9 MARKS)

1. Using a table, name the rib of the human skeleton stating the Anatomical name, the layman's term and the number of ribs.

SECTION 2 C

(10 marks)

1. Your sister Samu was burned by hot water while cooking in the family kitchen. She has a blister that broke on its own. Explain to your sister the Anatomy of the skin and name the layers of the epidermis and the dermis. Explain why she is experiencing severe pain.

SECTION 2 D

(10 MARKS)

1. Describe the structure of a cell membrane.